

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
15 January 2004 (15.01.2004)

PCT

(10) International Publication Number  
**WO 2004/004645 A2**

(51) International Patent Classification<sup>7</sup>: **A61K**

(21) International Application Number:  
PCT/US2003/020994

(22) International Filing Date: 7 July 2003 (07.07.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/394,770 10 July 2002 (10.07.2002) US

(71) Applicant (for all designated States except US):  
ARMKELL LLC. [US/US]; 469 North Harrison Street,  
Princeton, NJ 08543 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): WINSTON, An-  
thony, E. [US/US]; 42 Tall Oaks Road, East Brunswick,  
NJ 08816 (US). MAYER, Carl [US/US]; 109 Vanderbilt  
Avenue, Woodbury Heights, NJ 08097 (US).

(74) Agent: SHEAR, Stephen, B.; Armkell LLC., 469 North  
Harrison Street, Princeton, NJ 08543 (US).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,  
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,  
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,  
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,  
MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE,  
SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,  
VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM,  
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),  
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,  
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,  
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,  
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Declaration under Rule 4.17:**

— of inventorship (Rule 4.17(iv)) for US only

**Published:**

— without international search report and to be republished  
upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

(54) Title: COMPOSITION FOR LESSENING MALODORS DURING HAIR TREATMENT AND HAIR REMOVAL AND  
METHOD OF USE

(57) Abstract: The use of strontium ions to reduce malodors associated with various chemical hair removal and hair treatment  
procedures is disclosed. Typical formulations include alkali metal thioglycolate depilatories containing from 0.2 % to 2 % strontium  
chloride.

WO 2004/004645 A2